

On reeds. Tansor, Norths. At present I have found only a very few specimens.

252. *Torula Plantaginis*, Corda, Ic. fasc. 3. tab. 1. f. 14. On leaves of Plantains. Stibbington, Hunts., 1828. I find exactly the same barren creeping threads of a perfectly distinct structure from the torulose threads as Corda. I suspect that further observations will show that this fungus has distinct sporidia. At present, however, it must remain in the genus *Torula*.

253. *Puccinia Galiorum*, Lk., Sp. vol. ii. p. 76. Dr. Johnston finds a beautiful variety on *Asperula odorata*.

254. *Æcidium Pedicularis*, Loboschutz. *Cœoma Pediculariatum*, Lk., Sp. vol. ii. p. 47. Near Berwick. Dr. Johnston, Sept. 1839. Only a very few specimens of this interesting species occurred.

255. *Æ. Asperifolii*, Pers. Syn. p. 208. On *Boraginæ*. Berwicks., Dr. Johnston.

256. *Uredo hypodytes*, Schlecht., Kl. exs. 83. Spittal Links. Berwicks., Dr. Johnston, who informs me that he has in vain looked for specimens this year, though it was very abundant when he first met with it.

LI.—*Notes on British Char, Salmo Umbla, Linn., S. Salvelinus, Don.* By WM. THOMPSON, Vice-Pres. Nat. Hist. Society of Belfast.

HAVING within the last few years, through the kindness of friends and correspondents, been favoured with specimens of Char from various localities in the British Islands, I shall here give some notes made upon them.

It may first be mentioned, that so late as the years 1835 and 1836, when the excellent volumes of Mr. Jenyns and Mr. Yarrell appeared, neither author had seen any Char from Ireland* or Scotland, and the original observations contained in their respective works were necessarily limited to examples of the fish from the lakes of England and Wales. In the Edinburgh Philosophical Journal for January 1835 (vol. xviii. p. 58), Sir Wm. Jardine noticed the *Salmo alpinus* as taken by his party in Sutherlandshire.

* When I supplied Mr. Yarrell with the published localities in Ireland for the Char, as noticed in his work, I had not seen any native examples of the species. In the Supplement to his 'British Fishes' (1839, p. 27), this author has offered a few remarks on Char sent him by Lord Cole from Loughs Eask and Melvin in Ireland—these are considered to be examples of the *S. Umbla*, Linn., and *S. Salvelinus*, Don.

The chief object of my inquiry was to learn whether, in the lakes of Ireland and of those in Scotland* from which I could procure specimens, the *S. Salvelinus*, Don, was to be found; and at the same time to ascertain, at least for my own satisfaction, whether its characters have sufficient permanency to entitle it to rank as a distinct species. As they are merely crude unfinished notes that are to follow, I shall here give the result of the investigation, that the reader may be in possession of it without entering into the details. In a fresh state I have had the opportunity of examining Char from three localities—Windermere (England), Lough Melvin (Ireland), and Loch Grannoch (Scotland); and either in spirits or preserved dry, from nine other lakes in Ireland and Scotland. The examination of these examples leads me to believe that the *S. Umbra*, Linn., and *S. Salvelinus*, Don, are but one species; one however that, like the *Salmo Fario*, is subject to extraordinary variety. In one lake the male fish can at a glance be distinguished from the female either by colour or by the many characters which are comprised under “form.” In another, so similar are the sexes in every external character, that without the aid of dissection they cannot be determined. In size we find the species ordinarily attain twice the length and several times the weight† in one lake that it does in another, although the area of their waters is of similar extent; indeed, in some of the largest lakes, this fish will be found not to attain near the size it does in some others which are but as pools in comparison—there are, however, various influences which account satisfactorily for such differences. In the form of the body again we find the species, and when in equally high condition, to be in one lake herring-like, and in another approximating the roundness of the Eel. So manifold are the differences presented by the Char now before me from various localities, that it would be tedious and perhaps useless to point them out in every case, and consequently this will only be attempted when they are remarkably striking, or particularly demand attention.

Oct. 25, 1836.—Through the kind attention of Captain Fayrer, R.N., I today received two specimens of Char from Loch Grannoch, Kircudbrightshire. On comparing them critically with the detailed descriptions of our British Char given by Yarrell and Jenyns, they were found to be both their

* The fine work of Sir Wm. Jardine on the Scottish *Salmonidæ* was not at the time announced.

† That the quantity of ova produced will vary accordingly, is illustrated by the difference between the number found in the Loch Grannoch and the Lough Melvin fish.

species, and likewise the *S. alpinus* and *S. Salvelinus* of Donovan's British Fishes*. On thus finding that a small loch produced the two supposed species, and that the examples were of different sexes, I endeavoured to procure a number of individuals for the purpose of ascertaining if the difference were sexual; but this fish is taken during so short a period, that in this object I was disappointed for that year. In a letter upon the subject from James Stewart, Esq., of Cairnsmere, Newtown-Stewart (Wigtonshire), to Capt. Fayrer, dated Nov. 1, 1836, it was observed—"I lost no time in despatching my men early yesterday morning to Loch Grannoch, though I must confess with very slight hopes of success in the object of their pursuit. The Char are never found in our lakes before about the 13th October, and in ten days again they disappear—the whole produce of the day's exertions amounted only to four very small fish." These were not considered worth sending forward. The object of the inquiry being made known to this gentleman, he at the same time remarked—"If my evidence is worth anything, I can give it with great confidence as to the Red Char [*S. Salvelinus*, Don.] being the male, and the Gray the female [*S. alpinus*, Don.] of the same species. I have noticed them frequently, when taken out of the water, eject the milt and roe, and never saw the former from a gray, or the latter from a red fish." I subsequently availed myself of Mr. Stewart's kindness in offering to procure specimens. On the 17th of October, 1838, "a dozen of the red and the same number of the gray fish," caught late that day in Loch Grannoch, were sent me by this gentleman, and being packed with great care, reached Belfast in excellent condition for examination on the morning of the 20th—the following observations were then made upon them.

These two dozen specimens—of the full size produced in this lake—are all from 7 to 8 inches in length, and the females generally somewhat shorter than the males. The difference in form between the sexes (as proved by dissection), both generally and particularly, is very great. The dorsal and ventral profile of the male fish are alike, the slope being similar from head to tail above and below: the female has the dorsal line much straighter, and the ventral much more convex than the male—a difference to be expected at the spawning season, and which would be less conspicuous at other times. The lower jaw of some of the males is slightly turned

* At the Meeting of the British Association held at Newcastle in 1838, the two examples from Loch Grannoch were shown to my friends Mr. Yarrell and Mr. Jenyns, both of whom looked upon them as representing their two species.

up and hooked; the head in this sex is very much larger in every part than in the female, and the size of the fins is much greater.

The males, though differing in intensity of colour, may be described as lilac-black or dusky, relieved by a lilac tinge on the uppermost third of the body, viewed lengthwise, from the dorsal ridge, becoming however gradually paler from this part; the middle of the sides is lilac-gray, beautifully and somewhat closely marked with round scarlet spots about a line in diameter; the lowest portion of the sides is of a salmon-coloured scarlet without spots. The head and the dorsal fin are dusky, with a lilac tinge; the pectorals dusky above, tinged with scarlet beneath where they rest upon the part of the body which is of this colour; the ventrals are bright scarlet, with occasionally a dusky longitudinal band inside the margin, which is white; the anal fin dusky, tinged with scarlet—in all; the ventrals and the anal fin have a white margin, and some have the lower lobe of the caudal fin likewise of this colour: two or three individuals have a tinge of red on the caudal fin. Donovan's *description* of the colour of *S. Salvelinus* agrees admirably with the present specimens.

The females in *colour* somewhat resemble Donovan's *S. alpinus*: the uppermost third of the body, viewed lengthwise, from the dorsal ridge, is dusky, relieved by lilac, becoming gradually paler downwards, so that the middle of the sides presents a dull lilac—this part is adorned with numerous round spots of similar size to those in the male, but less bright in colour; some however are scarlet, but they are chiefly either pink, or of a dull chalky pinkish hue, as represented in Donovan's *S. alpinus*; the lowest portion of the sides is of a silvery lilac, without spots. The fins are all dusky, with a tinge of lilac; the margin of the ventrals, of the anal, and occasionally of the caudal fin, is white, as in the males—there is no regular spotting on the dorsal fins, as represented in Donovan's figures of his two species. The dorsal fins of the males are nearly all blackish, occasionally towards the tip transparent, which those of the females generally are, and in one or two individuals of the latter sex an approximation to spots may be faintly traced. One only of the males and a few of the females exhibit transverse markings along the sides like the "Par," but not so conspicuously. On *dissection*, the milt (of the ordinary white colour) and roe (of an amber* hue)

* This is the general colour; some are of a very pale yellow; the ova of both colours are of similar size.

are found to be just ready for exclusion: a small portion of both has been indeed shed by a few individuals. A specimen $7\frac{1}{2}$ inches in length weighs with the ova $2\frac{1}{4}$ oz., the ova separately $\frac{1}{2}$ an oz. and $1\frac{1}{2}$ drachm. On accurately reckoning these ova, which are 2 lines or $\frac{1}{6}$ th of an inch in diameter, they amount in number to 482—this I should say, or 500 for round numbers, is the average produce of the species in this lake. The example was selected out of seven females as of average size, and the ova as of average quantity. The air-bladder is in both sexes of a beautiful reddish lilac colour, like the inside of some species of North American *Unio*, as *U. pyramidatus*, Lea, &c. The stomach and intestines of the greater number (13 were cut up) were empty, but a few contained the remains of food which could not be satisfactorily determined—it consisted either of minute aquatic insects or entomostracous crustacea, more probably the latter. When boiled, the flesh of the male was of a rich salmon colour, that of the female a very little paler in hue.

Nov. 16, 1838.—To the kind attention of Viscount Cole I am indebted for twelve Char from Lough Melvin (partly in the county Fermanagh), sent immediately after capture. In the accompanying note, dated Florence Court, 15th November, His Lordship remarked—“I can procure you any number you wish, as the people are now taking them in cart-loads. The flesh of such as I send is white and soft, and different from what that of Char is in any other lough.”

These specimens, which are in a fresh state and excellent condition for examination, are all from 10 to 12 inches in length, and differ greatly from those of Loch Grannoch, in presenting little or no beauty of appearance. The upper half of the body, in both sexes, is of a dull blackish lead colour, unrelieved by spotting in any but three or four individuals, which exhibit a considerable number of minute spots which are merely of a paler shade than the surrounding parts, and consequently inconspicuous; for more than half the space between the lateral line and ventral profile they are dull lead colour, without any spots except in the individuals just noticed; the lower portion of the sides varies in individuals from a pale to a rich salmon colour, which latter is seen in only one or two examples. The dorsal fins are of a uniform gray and transparent; in some, when closely examined, there appear roundish spots of a paler colour; pectorals dusky gray, darker towards the tips, except at the lower portion, which, partaking of the colour of the part of the body in which it rests, is of a pale pinkish white; ventrals in the brighter-coloured individuals with a white marginal line; in the duller-coloured examples

this does not appear, but all have the two or three first rays and their connecting membrane dusky, and the remainder red, and of a deeper hue than on any part of the body: anal fin partaking at its base of the colour of the part of the body to which it is attached, dusky towards the tip; white margin to the first ray in some of the brighter-coloured specimens only: caudal fin gray, of different shades in all; in the brightest individual varied with red, which appears at the base of the lower lobe.

The males are generally more gracefully formed than the females, and most of them rather brighter in colour, but there is no external character so strikingly different as to lead to a certain knowledge of the sex; some of the largest finned are females—in the Loch Grannoch Char the males had much the larger fins, and the sex was as unerringly distinguished by the colour as by the form, the accuracy of the distinction in both cases being established by dissection. Both sexes of the Lough Melvin fish represent the Welsh Char.

The colour of the flesh when boiled was rather pale, between the “sienna yellow” and “flesh-red” of Syme's Nomenclature of Colours; no difference of colour in that of the sexes. The milt and roe were in these specimens ready for exclusion. The ova severally reckoned from a fish 11 inches in length, and which had not shed any, were 959 in number, and of a pale yellowish colour—the ova generally, though equally mature, were lighter coloured than in the Loch Grannoch Char; they were of the same size, 2 lines in diameter.

The remains of food were found in only one out of the twelve specimens, and appeared to be a portion of the case of a cad-dis-worm. The vertebræ, as reckoned in two specimens, male and female, were 60 in number*.

Lord Cole informs me that this fish is called “Freshwater Herring” at Lough Melvin, though in the same part of the country the term “Char” is applied to the more ordinary state of the species as taken in other lakes. Its differing from the so-called Char, in being an insipid bad fish for the table, and pale in the flesh, is the chief reason of its being considered distinct from it. It will, however, be seen in the following pages, that the term “Freshwater Herring” is applied to the Char of several of the lakes in Connaught, and from one of which an example before me is identical with the fish of the English lakes. Examples of the Lough Melvin

* The vertebræ reckoned in a male and female of the Loch Grannoch fish were in the former 60, and in the latter 62 or 63—this must be considered an accidental variation.

Char, taken at the same time as those just noticed, were sent by Lord Cole to Mr. Yarrell, and in the Supplement to this author's 'History of British Fishes' (p. 27) are noticed as identical with the Welsh species.

London, May 1840.—During the latter half of this month I had the opportunity of seeing quantities of Char from Windermere exposed for sale at Mr. Groves's, the well-known fishmonger in Bond Street. On examination they differed much from each other in size of fins: their colour was precisely that of the Lough Melvin fish; and, like it too, the flesh of specimens I bought in the last week of the month was pale-coloured and soft—they were now in such bad condition that Mr. Groves ceased to purchase them*.

So far, the examples of Char treated of were examined when fresh. The following, after being preserved in spirits or in a dry state, have been received from the under-mentioned Scottish lakes:

L. INCH—which is one of the localities for Char noticed by Pennant. Hence two fine specimens, about 14 inches in length, were kindly sent me, in May 1837, by Professor Allen Thomson of Aberdeen. They would be called the "Northern Char." The stomach of one of these was crammed with food, consisting of insect larvæ, entomostracous crustacea, a small *Notonecta* or Boat-fly, bivalve shells of the genus *Pisidium*, and minute gravel. Its cæca were 38 in number.

L. CORR and L. KILLIN, INVERNESS-SHIRE. From these lakes examples of Char were brought me by my relative Robert Langtry, Esq., of Fortwilliam, near Belfast, on his return from Aberarder, after the sporting season of 1838. The Loch Corr specimen—a "Northern Char"—is in beauty of colour, and elegance combined with strength of form, the finest example I have seen; it is of a fine deep gray on the upper parts, becoming lighter towards and below the lateral line, about which it is adorned with white spots; on the lower portion of the sides it is silvery, and beneath of the most brilliant red. This specimen is 16 inches in length, and, with another of similar size, was taken by my friend when angling with an artificial fly, on the 25th of September. The other, which was eaten, was excellent and high-flavoured, the flesh

* When at the inn at Waterhead, at the northern extremity of Coniston Water, during a tour to the English lakes in June 1835, a number of Char from this lake were kept alive by our host in a capacious wooden box or trough, into which a constant stream of water poured. They were fine examples of the species, about a foot in length. Here I was informed that a supply of this delicate fish was always kept up, that the "curious" visitor might gratify his taste at any season by having fresh Char set before him at the rate of ten shillings for the dozen of fish.

firm and red. Loch Corr is described to me as a deep mountain-lake or basin, less than a mile in length, with rocks rising precipitously above it at one part; at another it is shallow and sandy, and here this fish is taken in some quantity when spawning. A beautifully clear river issues from the lake. About fifteen miles from Loch Corr is Loch Killin, situated in the pastoral vale of Stratherrick. Three specimens of Char have thence been brought me. They are remarkably different from the L. Corr example, are of a clumsy form, have very large fins like the Welsh fish, and are very dull in colour—of a blackish leaden hue throughout the greater part of the sides, the lower portion of which is of a dull yellow; no red appearing anywhere. So different indeed is this fish from the Char of the neighbouring localities, that it is believed by the people resident about Loch Killin to be a species peculiar to their lake, and hence bears another name—“Haddy” being strangely enough the one bestowed upon it. This fish is only taken when spawning, but then in great quantities, either with nets, or a number of fish-hooks tied together with their points directed different ways. These, unbaited, are drawn through the water where the fish are congregated in such numbers, that they are brought up impaled on the hooks. The largest of my specimens is 16 inches in length, and others of similar size were brought to my friend at the same time—on the 26th or 27th September, when about a “cart-load” of them was taken. The flesh of some was “white and soft. They contained ova the size of peas*.” On dissection my specimens were found to be male and female—externally the sex could not have been told with certainty. Their stomachs and intestines were empty. This fish bears a resemblance to the Lough Melvin Char, but differs from it in some characters. It will have been remarked that, in accordance with the Irish fish, the sexes present little difference externally either in form or colour, that their flesh is soft and insipid and very pale, and that neither is designated *Char*. The remarks of Lord Cole on the L. Melvin fish, and of Mr. Langtry on the L. Killin one, were in every respect similar. To the latter gentleman the dozen of L. Melvin fish were shown the day they were received, and in colour, &c., they were pronounced just the same in appearance as the L. Killin fish in an equally fresh state.

In the following instances the CHAR OF IRELAND have

* At this very time, the Char from the neighbouring Loch Corr were in high condition. This is one out of numerous instances which might be adduced respecting the different period of spawning in contiguous localities.

been noticed:—In Camden's 'Britannia' it is remarked—“Lough Esk, near Townavilly [co. Donegal], yields the Char in great abundance: a most delicate fish, generally about 9 inches long.” (Gough's ed. vol. iii. p. 644.) I have seen a specimen from this locality in Mr. Yarrell's collection; it was supplied to him by Lord Cole, and is noticed in the Supplement to his 'British Fishes' (p. 27) as *S. Umbla*. Smith, in his 'History of Waterford,' p. 208, observes—“In these mountains [Cummeragh] are four considerable loughs, two of which are called by the Irish Cummeloughs, and the other two Stilloges, the largest of which contains about five or six acres. In these loughs are several kinds of trout; and in the former is a species of fish called Charrs, about 2 feet long, the male gray-, the female yellow-bellied; when boiled the flesh of these Charrs is as red and curdy as a salmon, and eats more delicious than any trout. It is remarkable that this kind of fish is often found in such lakes situated in mountainous places, as we learn from Dr. Robinson's Natural History of Westmoreland and Cumberland.” In the British Zoology of Pennant (vol. iii. p. 409, ed. 1812) it is mentioned on the authority of “Dr. Vyse, an eminent physician and botanist at Limerick, that the Charr is found in the lake of Inchigeelagh, in the county of Cork, and in one or two other small lakes in this neighbourhood.” In Dubourdieu's History of the county of Antrim (vol. i. p. 119) there is a communication from Mr. Templeton on the Char of Lough Neagh, illustrated by a figure; it is here stated to be the same as the Char of Windermere, as distinguished from the *S. Salvelinus*, Don. Mr. Templeton here informs us that this fish is taken in L. Neagh “from the end of September to the end of November in nets along with Pollans [*Coregonus Pollan*]. They always keep the deep water, except in warm weather, when they are sometimes found in the shallow. The best time for taking them is in nights that are calm, clear, and a little frosty; the capture of the Pollans begins to fail sooner than that of the Whiting,”—the name by which the Char is known at this lake. It is likewise remarked, that “the Whiting is generally about 12 inches long, though I have seen one of 15.” Again, in his Catalogue of 'Irish Vertebrate Animals' (Mag. Nat. Hist. vol. i. new series), Mr. Templeton observes,—“In a lake of the county of Donegal, near Dunfanaghy, I observed some boys catching small Char with lines and hooks baited with common earthworms. * * * In L. Eaghish †, in the county Monaghan, I have known them caught agreeing exactly in their

† Incorrectly printed “Esk” in the Magazine.

colour with those of L. Neagh." In two of the localities just noticed the Char have become very scarce, it may be, even extinct. In February 1839, I was informed by Mr. G. J. Allman, of Bandon, that in the lakes at the source of the river Lee—those alluded to in the 'British Zoology'—celebrated till within the last ten years for their fine Char, and which were abundant, that they are not now to be procured, and are nearly, if not altogether destroyed. Their destruction is attributed by anglers and the people of the neighbourhood to the Pike, this voracious fish having much increased of late years—the natural haunts of the Pike and Char are, however, very different. When visiting some of the fishing stations at Lough Neagh, in September 1834, I was told by the fishermen about Crumlin, Antrim, Toome, &c., that they have not known any Char to be taken in the lake for at least ten years, although about twenty years ago they were abundant. Subsequently I was informed by a most intelligent man, now resident in Belfast, but who lived for a long period at Glenavy, on the shore of L. Neagh, and spent much time in fishing, that Char were abundant at the period just mentioned; he has seen five hundred taken at one draught of the net, and this not in the breeding season. A part of the lake, which was the deepest (36 fathoms) within his range of fishing, was called the Whiting-hole, from being the chief haunt of this species. In 1837 I offered a handsome reward for a Lough Neagh Whiting, but it was in vain that the fishermen of Glenavy endeavoured to procure one, although the once-favoured haunts of the species were tried, including the Whiting-hole. The fishermen at a second station tried with no better success.

The cause of its disappearance from such a vast body of water as is contained in this lake, or at least from its old haunts there, I cannot pretend to explain; one fisherman questioned on the subject did, however, and without hesitation, account for it by saying, that "they once went down the river Bann to the sea, and never came back again."!

From the following Irish lakes, in addition to Loughs Melvin and Eask already mentioned, I have seen examples of Char:—

L. KINDUN, county Donegal. A specimen taken by Mr. Wm. Marshall, of Belfast, when fly-fishing here, at the end of June 1837, was kindly submitted to my examination. In length it was $8\frac{1}{2}$ inches, and agreed with the "Northern Char." In an accompanying note it was stated that "its stomach contained numerous small worms."

L. GARTAN, county Donegal*. Hence, on July 18, 1838, I was favoured with a specimen by John Vandeleur Stewart, Esq., of Rockhill, Letterkenny. This gentleman remarked at the same time, that it was taken with the fly about five weeks previously, and that there are a great many Char in the lake, which is seven miles distant from Letterkenny. It is 10 inches in length, and a fine example of the "Northern Char"—the spots, which are numerous, are nearly all below the lateral line.

L. DAN, county Wicklow†. From this lake several Char have been kindly sent me by my friend Mr. R. Callwell, of Dublin. None are above $7\frac{1}{2}$ inches in length; they present some of the characters both of the Northern and Welsh Char, but appertain more to the former. In February 1839, Mr. George Smith, of Baggot Street, Dublin, informed me, that in summer, four or five years since, he, when using small showy flies (with which they are often captured here), took thirteen Char in this lake within half an hour; the water was very rough—they were all taken within the space of two yards, though he fished to some little distance on every side. In the summer of 1838 this gentleman saw about a dozen Char lying dead and much swollen on the banks of Lough Dan. Mr. Smith has, within the last few years, seen Char about 15 inches long caught in Llanberris lake in North Wales. It will be remembered that Pennant mentions this fish as once found here, but as entirely destroyed by the mineral streams from the copper mines contiguous to the lake.

LOUGHNABRACK, county Longford. In Mr. R. Ball's collection is a Char from this locality.

L. CORRIB, county Galway. I have been favoured with an example from this extensive lake by Mr. W. R. Wilde, who states that Char are captured here in great quantity (especially about Cong) in draught-nets along with Salmon throughout the season for taking this fish—from the 1st May to the 12th August. It is commonly called here *Murneene*, and by those who give an English name, "Freshwater Herring." These names are applied to the Char in three lakes in the county Mayo, and from all of which Mr. Wilde has seen specimens. The example from L. Corrib is $13\frac{1}{2}$ inches in length, and would be called the Northern Char—in a dry state, and after being preserved for some time, it is in all respects identical with my specimens from Windermere.

A few very brief remarks may be offered in conclusion. It

* When visiting Lough Derg in this county, in the autumn of 1837, I was assured that Char are abundant in it.

† In the lake of Luggela, in this county, the Char is likewise taken.

would appear that the differences here noticed in the Char are chiefly induced by *locality*, but this, in itself, is rather an effect than a cause. The cause is, I conceive, based on geological influences, as the "formation" in which the lake inhabited by this fish is situated, and whether there be a prevalence of rock, gravel, sand, or peat—if fed by springs or a goodly river, and if the latter the formation through which it flows—the depth of water, &c. According to these features, the quality of the water, and the minute animals constituting the food of the Char will vary, and the latter not only in the quantity produced, but in species. According to its food the external appearance of this fish is influenced, as well as the flavour and colour of its flesh. No proper comparison, again, can in any respect be made between the Char of different localities unless the examples be in similar condition, and which, as before mentioned, they sometimes are not in adjacent lakes at the same period of the year. A great deal might be said on the manifold influences affecting this species, but it is for my friends, the authors of the two great works now in progress—M. Agassiz in his 'Freshwater Fishes of Central Europe,' and Sir W. Jardine in his 'Scottish Salmonidæ'—to descant upon them.

When my attention was first given to this subject, I intended to enter fully into the history of the Char as a British species. This would now be superfluous, and I content myself with contributing the rough notes made upon the subject, as ere long we shall doubtless have before us, in the works just mentioned, a most ample history of the *Salmo Umbla*.

LII.—*A List of Mammalia and Birds collected in Assam by John McClelland, Esq., Assistant Surgeon in the service of the East India Company, Bengal Establishment: revised by T. Horsfield, M.D., V.P.L.S., &c.*.*

[Concluded from p. 374.]

Order II. INSESSORES, Vigors.

Tribus FISSIROSTRES, Cuv.

Fam. MEROPIDÆ.

Genus NYCTIORNIS, Swains. Zool. Illust. II. Pl. 56.

9. *Nyctiornis Athertonii*.

"Toes much longer than the tarsi; outer ones united to the last

* Communicated by Dr. Horsfield to the Zoological Society of London, Oct. 22, 1839, and extracted from the Proceedings of the Society.